United States Department of the Interior
Bureau of Land Management
Royal Gorge Field Office
3028 E. Main Street
Cañon City, CO 81212

Environmental Assessment

New Grazing Authorizations for Alamo, Apache City, Eight Mile Park, Hezron Gulch, and Silver Mountain, Allotments

DOI-BLM-CO-200-2013-0049 EA

February, 2013

BLM

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CHAPTER 1 - INTRODUCTION

1.1 IDENTIFYING INFORMATION

PROJECT TITLE: Range – New Grazing Authorization for Alamo #05834, Apache City #05909, Eight Mile Park #05224, Hezron Gulch #05825, and Silver Mountain #05765 Allotments.

PLANNING UNIT: Huerfano #8, Gold Belt #5, Other Lands #10.

LEGAL DESCRIPTION:

ALLOTMENT	COUNTY	LEGAL	PUBLIC ACRES
Alamo	Huerfano	Sixth Principle Meridian (within) T. 28 S., R. 69 W., secs. 1, 2, 11-15 (inclusive). T. 28 S., R. 68 W., sec. 12.	1200
Apache City	Huerfano	Sixth Principle Meridian (within) T. 25 S., R. 66 W., sec. 19.	79
Eight Mile Park	Fremont	Sixth Principle Meridian (within) T. 18 S., R.70 W., secs. 30, and 31. T. 18 S., R.71 W., secs. 11, 12, 14, 17, 18 and 20.	1080
Hezron Gulch	Huerfano	Sixth Principle Meridian (within) T. 29 S., R. 65 W., sec. 7. T. 29 S., R. 66 W., sec. 1.	125
Silver Mountain	Huerfano	Sixth Principle Meridian (within) T. 27 S., R. 69 W., sec. 34. T. 28 S., R. 69 W., secs. 2, 9, and 10.	561

1.2 INTRODUCTION AND BACKGROUND

BACKGROUND: This EA has been prepared by the BLM to analyze the authorization to graze livestock on the Alamo, Apache City, Eight Mile Park, Hezron Gulch, and Silver Mountain Allotments for a term of ten years. No changes in livestock numbers or animal unit months (AUMs) are proposed. The Alamo, Eight Mile Park, and Silver Mountain Allotments were previously analyzed for permit renewal under BLM-CO-057-1998-31 ADR. The Apache City Allotment was previously analyzed for permit renewal under BLM-CO-200-2006-0011 CE. No NEPA documentation or references to such have been located for the Hezron Gulch Allotment.

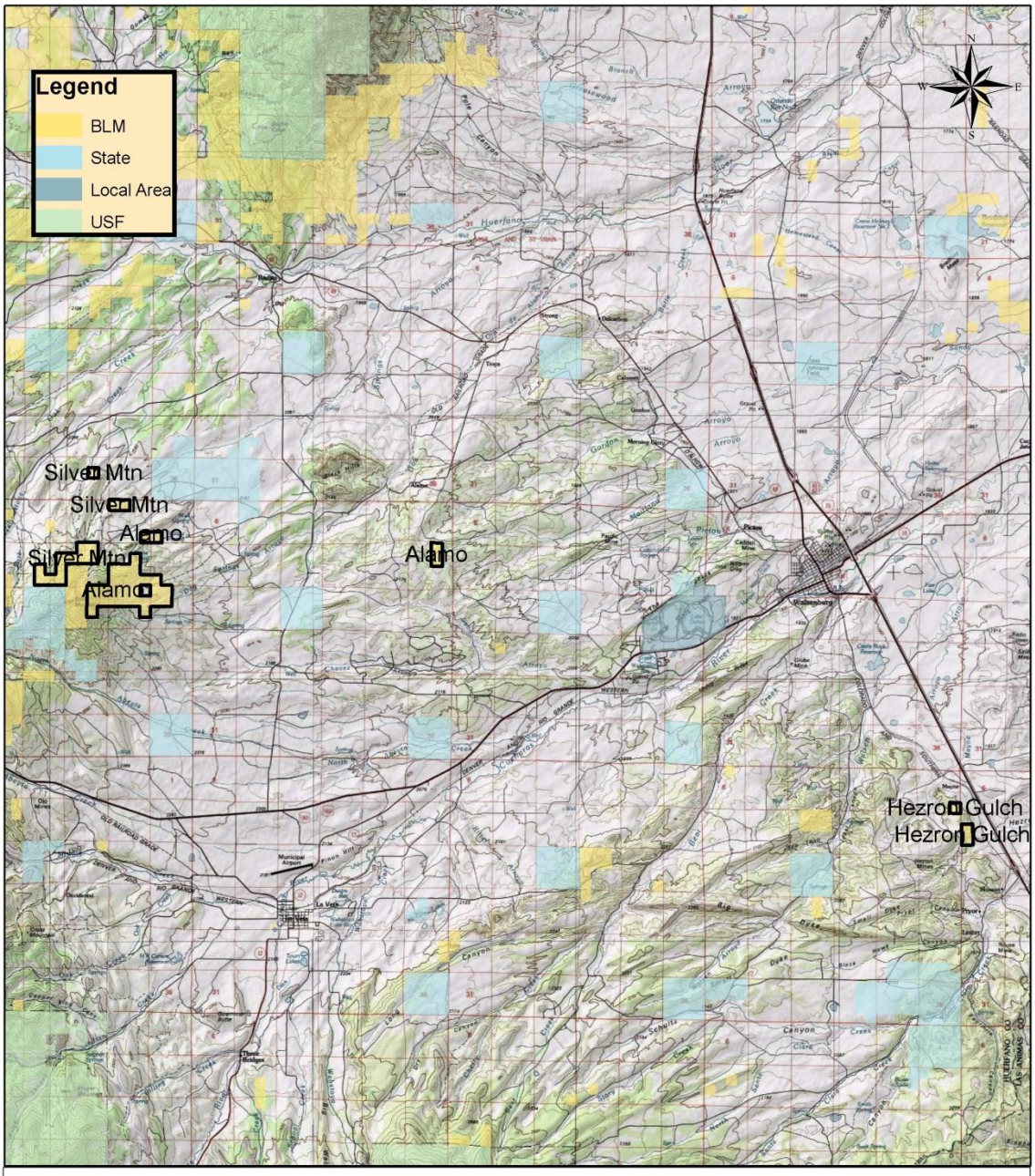
The previous and future management was and will be "custodial management". Custodial management is generally used on allotments that consist of relatively small or scattered parcels of public lands that are unfenced from large amounts of private land, are difficult to manage

separately, and have limited resource issues. In order to be included in a "Custodial" classification, resources on an allotment are generally considered to be in acceptable condition and are generally producing at or near their potential. Under custodial management, the permit includes a specific number of livestock and the specific amount of grazing use (AUMs) authorized on the public land. However, the lessee is not restricted to that specific number of livestock, nor restricted to specific grazing dates, as long as the authorized amount of grazing use on public land within the pasture is not exceeded.

Grazing use on the allotments was previously scheduled as follows:

Allotment	Number	Kind	Grazing Period Begin	Grazing Period End	% Public Land	AUMs
Alamo	4	Cattle	03/01	02/28	100	42
Apache City	1	Cattle	03/01	02/28	100	4
Eight Mile Park	1	Cattle	03/01	02/28	100	13
Hezron Gulch	2	Cattle	03/01	02/28	100	21
Silver Mountain	1	Cattle	03/01	02/28	100	3

Review of grazing use on these allotments included an assessment of the "health" of public land within these allotments in relation to Standards for Public Land Health and conformance with Guidelines for Livestock Grazing Management in Colorado. Efforts to gather information necessary to assess the land health on the allotments listed above occurred in 2007 and 2009. The interdisciplinary land health evaluations indicated that the allotments are meeting applicable standards for public land health.

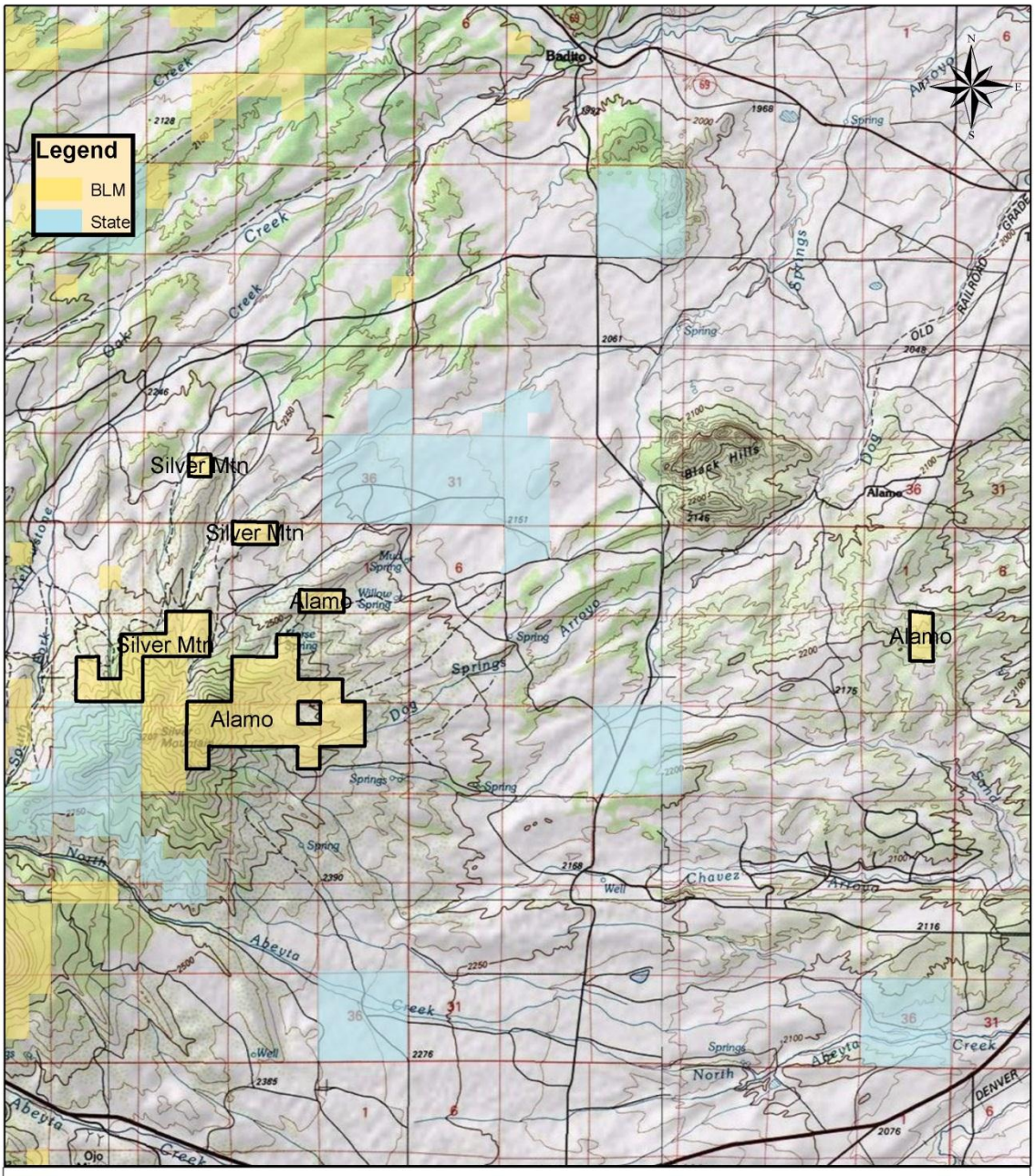


OVERVIEW MAP
Alamo, Silver Mountain, and Hezron Gulch Allotments

DOI-BLM-CO-200-2013-0049EA

0 1.5 3 6 Miles

NOTE TO MAP USERS
No warrantee is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of the data layers shown on this map. The official land records of the data providers should be checked or current status on any specific tract of land.



Project MAP
Alamo, and Silver Mountain Allotments

DOI-BLM-CO-200-2013-0049EA

0 0.5 1 2
Miles

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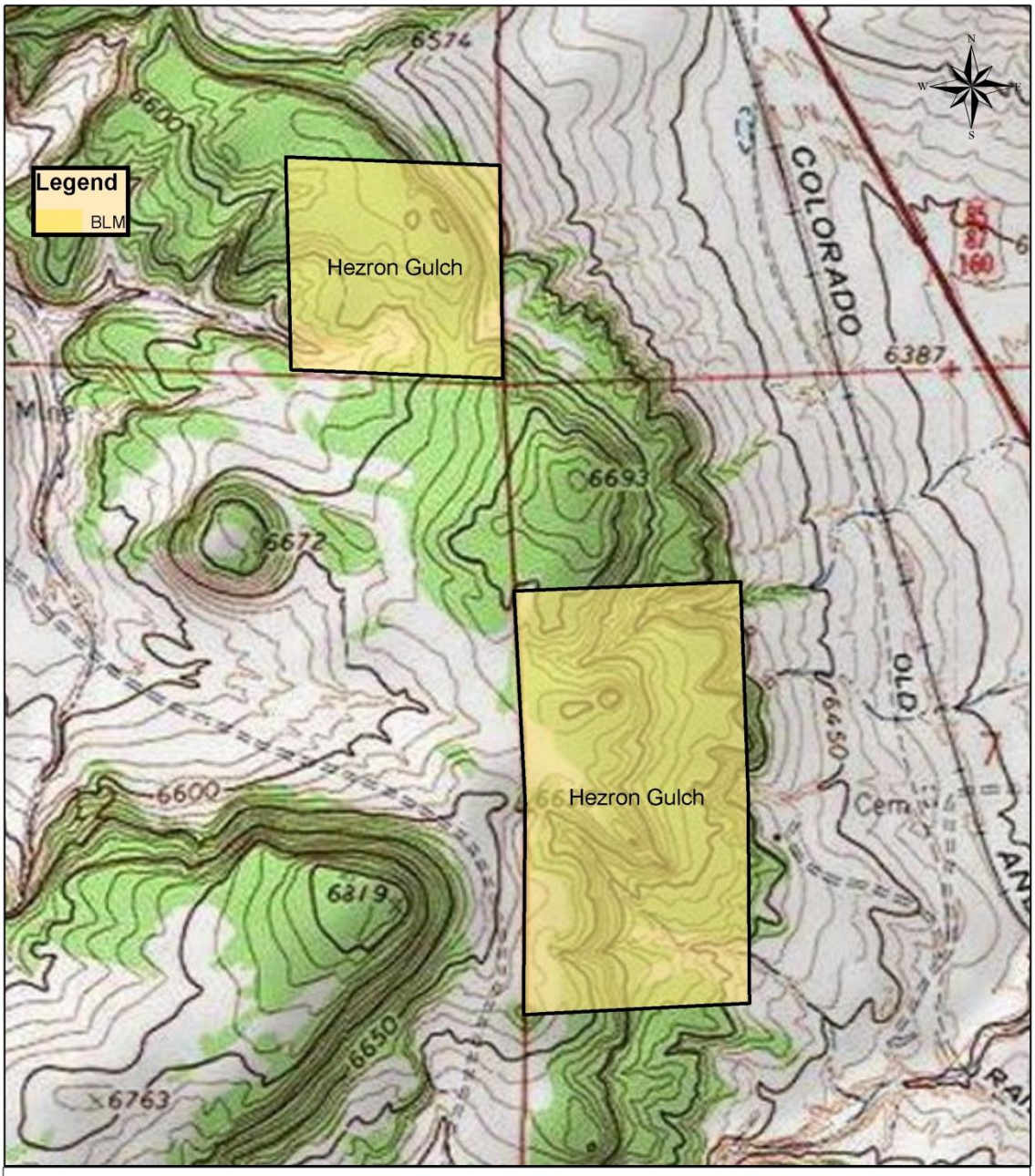

Project MAP
Hezron Gulch Allotment

DOI-BLM-CO-200-2013-0049EA

0 0.125 0.25 0.5 Miles

NOTE TO MAP USERS
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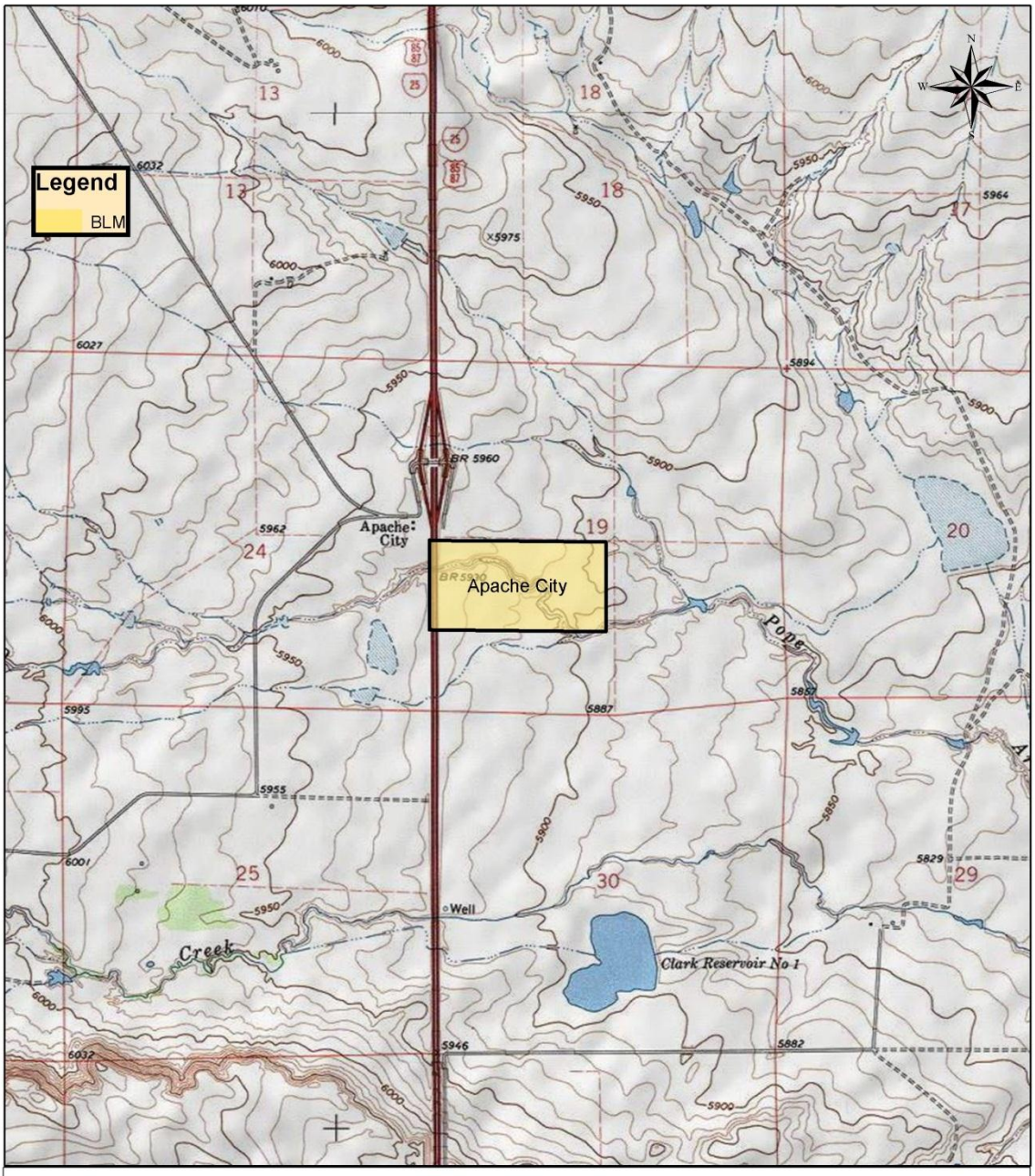

OVERVIEW MAP
Apache City Allotment

DOI-BLM-CO-200-2013-0049EA

0 0.25 0.5 1 Miles

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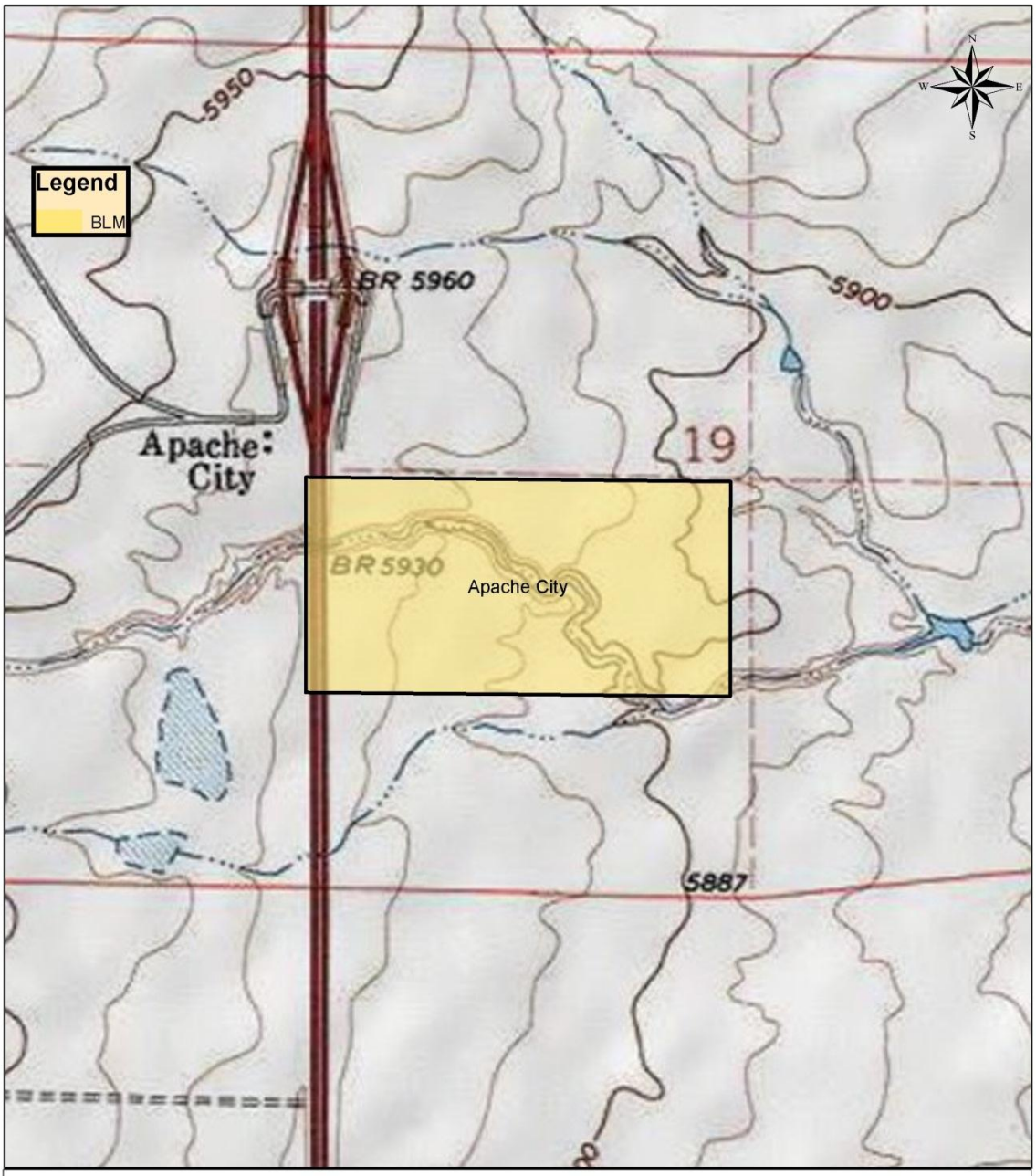

Project MAP
Apache City Allotment

DOI-BLM-CO-200-2013-0049EA

0 0.125 0.25 0.5 Miles

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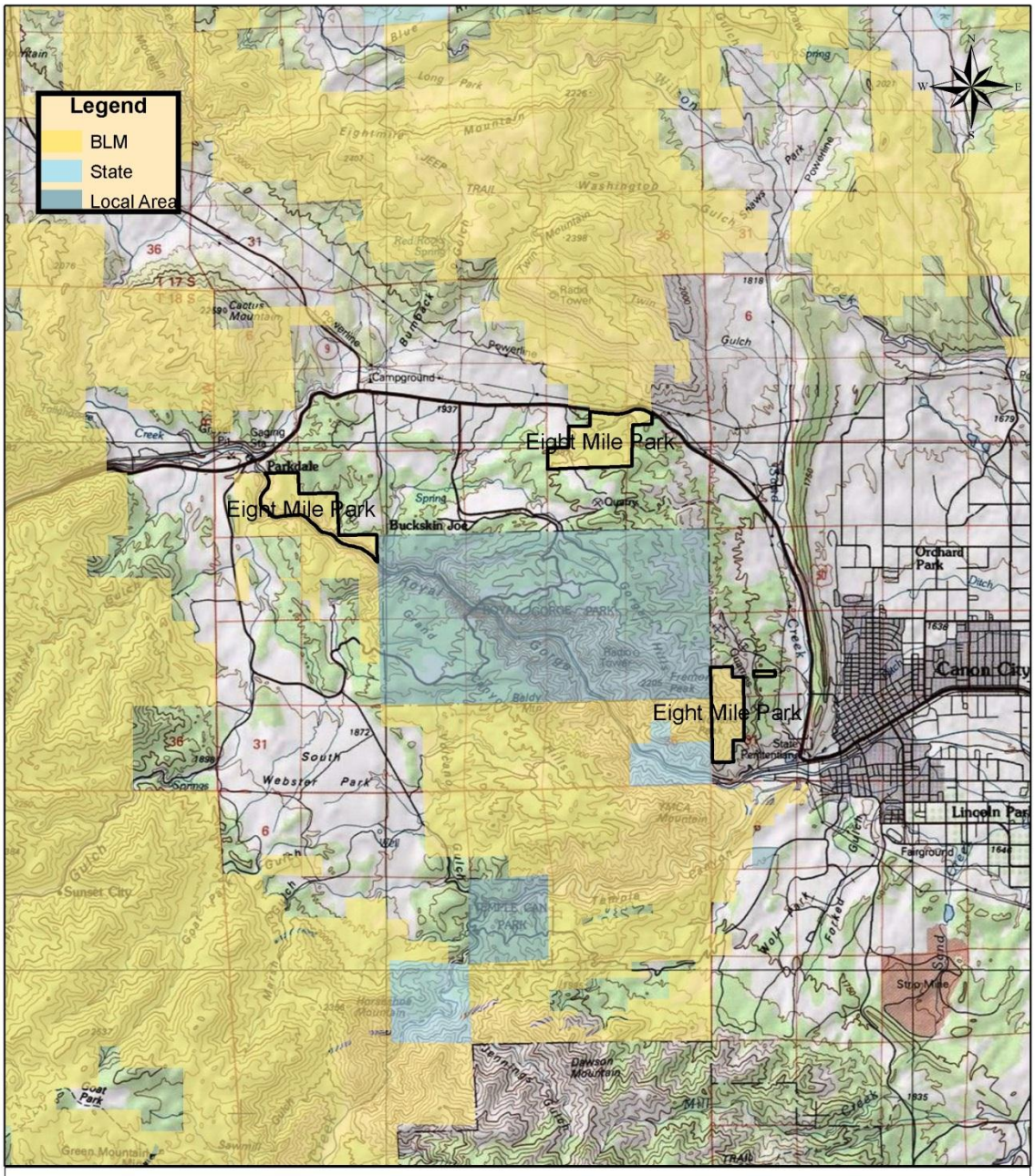

OVERVIEW MAP
Eight Mile Park Allotment

DOI-BLM-CO-200-2013-0049EA

0 1 2 4 Miles

NOTE TO MAP USERS
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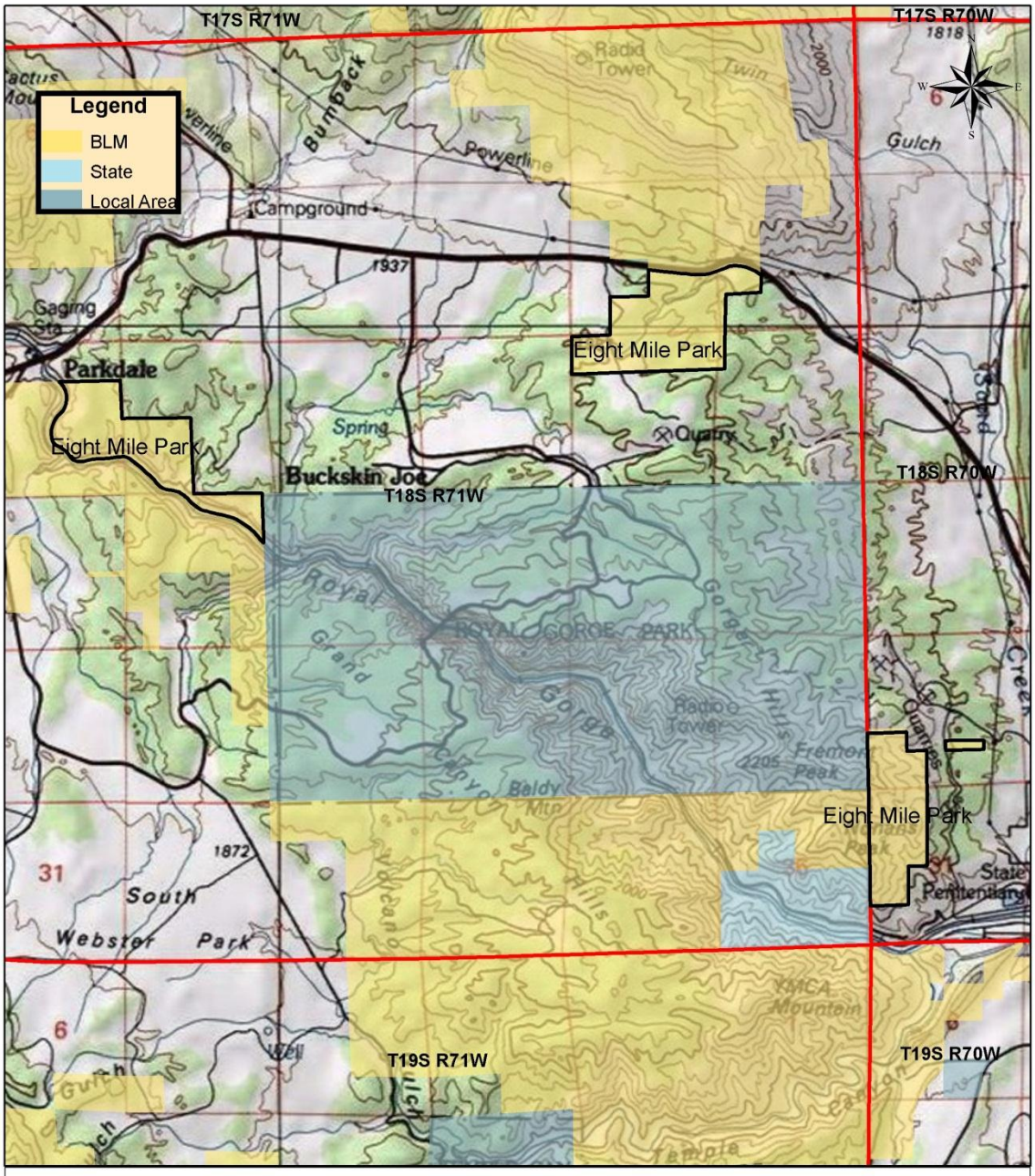

PROJECT MAP
Eight Mile Park Allotment

DOI-BLM-CO-200-2013-0049EA

0 0.5 1 2 Miles

NOTE TO MAP USERS
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1.3 PURPOSE AND NEED

The purpose of the proposed action is to complete a site-specific evaluation of grazing that provides information to be analyzed by the BLM in conformance with the implementing regulations for the NEPA (40 CFR Part 1500), FLPMA, and Public Law 106-113 section 325 to determine whether changes are necessary to current management of the allotment to be in accordance with 43 CFR 4100 and consistent with the provisions of the Taylor Grazing Act, Public Rangelands Improvement Act. The purpose of the action is also to ensure that all authorizations implement provisions of, and is in conformance with, the Royal Gorge Resource Management Plan (5-13-1996), and in conformance with the Secretary Approved Rangeland Health Standards for Colorado. The action is needed to respond to application of new grazing use on BLM land.

1. This analysis is needed to consider the impacts of livestock grazing use on public lands within the respective allotments to determine if they are meeting the Standards for Public Land Health and are within the Guidelines for Livestock Grazing in Colorado.
2. Secondly, the proposed action is needed to ensure that grazing use continues to help the allotment meet Standards for Public Land Health and future grazing use on the allotments is consistent with Guidelines for Livestock Grazing Management in Colorado.

1.4 DECISION TO BE MADE

The BLM will decide whether to approve the proposed grazing authorizations based on the analysis contained in this Environmental Assessment (EA). This EA will analyze impacts associated with issuing a ten year grazing permit. The BLM may choose to: a) accept the project as proposed, b) accept the project with modifications/mitigation, c) accept an alternative to the proposed action, or d) not authorize the project at this time. The finding associated with this EA may not constitute the final approval for the proposed action.

1.5 PLAN CONFORMANCE REVIEW

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: Royal Gorge Resource Management Plan

Date Approved: 05/13/96

Decision Number/Page: 1-4, 1-8, 5-4, 5-9, 6-4, 6-6, 8-4, 8-6, 10-4, 10-6, C-30, C-31, C-35, C-36, C-38, C-41, C-42, C-43, C-44

Decision Language:

1-4: Grazing is authorized on 62 allotments.
1-8: Allotments are categorized as follows: 25 Improve, 3 maintain, 32 custodial, 2 unalloted.
5-4: Grazing is authorized on 123 allotments.
5-9: Allotments are categorized as follows: 35 Improve, 13 maintain, 73 custodial, 2 unalloted.
6-4: Grazing is authorized on 70 allotments.
6-6: 22 allotments are categorized as Improve .
8-4: Grazing is authorized on 61 allotments.

8-6: Allotments are categorized as follows: 7 Improve, 0 maintain, 54 custodial, 0 unalloted.
10-4: Grazing is authorized on 132 allotments.
10-6: Allotments are categorized as follows: 0 Improve, 0 maintain, 126 custodial, 6 unalloted.
C-30: Base livestock grazing management on the 1981 Royal Gorge Area Grazing EIS.
C-31: Authorize adjustments in the actual AUMs when warranted by weather and other conditions.
C-35: Conduct EIS on allotments with conflicts, and adjust stocking rates and season of use accordingly.
C-36: Grazing systems will be implemented by an IAP. Plans will be prepared in consultation, cooperation, and coordination with the permittee and other affected parties to meet multiple use objectives.
C-38: Continue to construct range improvement projects on an as needed basis. Complete NEPA documentation on each project as needed.
C-41: Adjustments in grazing use will be made by allotment on a case by case basis. Changes in number of livestock, season of use, duration of use, and class of livestock can be made based on monitoring studies and inventory data.
C-42: The grazing treatment on Improve category allotments will require a rest standard to allow a time period for forage species to recover from the last grazing period before the plants are regrazed.
C-43: Maximum allowable utilization on allotments with dormant season grazing will be 80% annual production on grass species and 60% of annual production on shrub species.
C-44: On single pasture allotments with season long spring-summer grazing, utilization will be held to the 40 – 60% range on forage species in lieu of a rest standard. This requirement will be on high elevation allotments where deferment or dormant season use is impracticable because of deep snow and fencing the allotment into smaller units is uneconomical.

In January 1997, the Colorado State Office of the BLM approved the Standards for Public Land Health and amended all RMPs in the State. Standards describe the conditions needed to sustain public land health and apply to all uses of public lands.

Standard 1: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes.

Standard 2: Riparian systems associated with both running and standing water function properly and have the ability to recover from major disturbance such as fire, severe grazing, or 100-year floods.

Standard 3: Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential.

Standard 4: Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.

Standard 5: The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado.

Because standards exist for each of these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in Chapter 3 of this document.

1.6 SCOPING, PUBLIC INVOLVEMENT AND ISSUES

1.5.1 Scoping: NEPA regulations (40 CFR §1500-1508) require that the BLM use a scoping process to identify potential significant issues in preparation for impact analysis. The principal

goals of scoping are to allow public participation to identify issues, concerns, and potential impacts that require detailed analysis.

Persons/Public/Agencies Consulted: Scoping, by posting this project on the Royal Gorge Field Office website, was the primary mechanism used by the BLM to initially identify issues. In addition to the website, the Colorado State Land Board and Colorado Parks and Wildlife were consulted. No comments or issues were received.

CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

The purpose of this chapter is to provide information on the Proposed Action and Alternatives. Alternatives considered but not analyzed in detail are also discussed.

2.2 ALTERNATIVES ANALYZED IN DETAIL

2.2.1 Proposed Action

The proposed action is to issue grazing authorizations on the five allotments listed below for the next 10 years under custodial management. New "Terms and Conditions" addressing forage utilization, cultural and paleontological resources will be included in the new authorizations (see below).

Range conditions or livestock distribution may warrant new range improvements. These improvements include but are not limited to: water developments, fences, livestock trails, livestock handling facilities and cattleguards. Proposals for new range improvement projects are subject to review under NEPA. This review will determine the appropriate level of NEPA analysis to be conducted.

Under the Proposed Action alternative, grazing on the allotments would be scheduled as follows:

Allotment	Number	Kind	Grazing Period Begin	Grazing Period End	% Public Land	AUMs
Alamo	4	Cattle	03/01	02/28	100	42
Apache City	1	Cattle	03/01	02/28	100	4
Eight Mile Park	1	Cattle	03/01	02/28	100	13
Hezron Gulch	2	Cattle	03/01	02/28	100	21
Silver Mountain	1	Cattle	03/01	02/28	100	3

The following terms and conditions would be included in the grazing permit:

- Grazing use on the allotment will be authorized under Custodial Management. Although, the permit/lease shows a specific number of livestock authorized on public land, the permittee is not restricted to that specific livestock number nor restricted to specific grazing dates as long as the authorized amount of grazing use on public land is not exceeded and the allotment is used in conjunction with the unfenced private land.

- The authorized amount of grazing use on this allotment is the estimated carrying capacity of the allotment and is expected to result in utilization levels of 40% - 60% of the total annual forage production of key forage species. Utilization will be limited to 40% - 60% on grass forage species during the growing season and 80% of previous growth during the dormant season. Utilization on woody riparian species such as cottonwoods, aspen and willows will be limited to 40% of the current year's growth. Grazing use that exceeds these levels is not authorized. Livestock will be moved prior to the maximum utilization levels being exceeded.
- The permittee and all persons associated with the allotment operations shall not damage, destroy, remove, move or disturb any objects or sites of cultural, paleontological or scientific value, such as historic or prehistoric resources, graves or grave markers, human remains, ruins, cabins, rock art, vertebrate fossils and artifacts. If in connection with allotment operations under this authorization any of the above resources are encountered, the permittee shall protect such resources and immediately notify the BLM authorized officer of the findings.
- This Grazing Permit has been fully processed in accordance with all applicable laws and regulations. The grazing schedule complies with Guidelines for Grazing Management in Colorado and is designed to help the public land achieve the Standards for Public Land Health. In the event that the proposed grazing schedule fails to help public land achieve the Standards for Public Land Health, grazing use on any of these allotments may be revised at any time.

New Range Improvements: New range improvements may be proposed in the future under this alternative to help reduce any negative impacts and ensure that future livestock use continues to help the allotment meet Standards for Public Land Health. These improvements would be designed to serve as livestock control features to improve even utilization and defer grazing use in areas as needed. The following stipulations will be followed:

- New construction will require temporary motorized access to these improvements. All efforts will be made to hide or post closed any remnant travel routes created.
- All improvements (new or existing) may require motorized access for future maintenance needs.
- The basic four wire BLM fence specifications would apply to all new fences under this proposal. The bottom wire would be smooth and set no less than 16 inches from ground level. The top wire would be barbed and set no more than 42 inches from ground level.
- Some vegetative brush clearing may be required for all projects. Tree and brush clearing would occur outside the breeding and brood rearing season for migratory birds (May 15 thru July 15).

Monitoring Plan

The Allotments would be monitored for general compliance, utilization on upland and riparian forage, and management effectiveness.

Adaptive Management Options

Adaptive management is defined as a process where land managers implement management practices that are designed to achieve an acceptable resource condition in a timely manner. In addition, practices could be implemented when unforeseen circumstances occur such as drought and/or fire. All adaptive actions will be within the scope of effects in this document, or a supplemental NEPA document (Determination of NEPA Adequacy (DNA)) will be prepared. The table below provides a list of potential Adaptive Grazing Management Actions that can be applied as necessary:

Adaptive Grazing Management Actions (Tool Box):

1. Change season of use – do not exceed permitted AUMs
2. Change animal numbers- do not exceed permitted AUMs
3. Change animal class - do not exceed permitted AUMs
4. Change number of days livestock utilize a specific pasture
5. Adjust permitted AUMs based on appropriate monitoring averaged over three years
6. Defer livestock turn-on/off date
7. Rest from livestock grazing for one or more seasons
8. Construction of permanent fencing to control livestock distribution patterns, or exclude livestock from areas of concern (riparian, wetlands, springs)
9. Construct electric temporary fencing to control livestock distribution patterns
10. Remove permanent fencing and temporary fencing
11. Construct livestock water developments (springs, infiltrators, pipelines, tanks, windmill, sediment traps, wells, stock dams, submersible pumps, solar)
12. Remove existing water developments (springs, infiltrators, pipelines, tanks, windmill, sediment traps, wells, stock dams, submersible pumps, solar)
13. Trailing of livestock across the allotment

2.2.2 No Grazing Alternative

Under this alternative grazing use would not be authorized on the Alamo, Apache City, Eight Mile Park, Hezron Gulch, and Silver Mountain Allotments. The BLM would initiate a process in accordance with the 4100 regulations to permanently eliminate grazing use on these allotments.

2.3 ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

2.3.1 No Action Alternative.

The proposed action is subject to an EA because previous NEPA was determined to be inadequate. The no Action Alternative would be the same as the proposed action because no changes in management are proposed. Therefore, the No Action Alternative was considered but not analyzed in detail.

CHAPTER 3 - AFFECTED ENVIRONMENT AND EFFECTS

3.1 INTRODUCTION

This section provides a description of the human and natural environmental resources that could be affected by the Proposed Action and presents comparative analyses of the direct, indirect and cumulative effects on the affected environment stemming from the implementation of the actions under the Proposed Action and other alternatives analyzed.

3.1.1 Interdisciplinary Team Review

The following table is provided as a mechanism for resource staff review, to identify those resource values with issues or potential impacts from the proposed action and/or alternatives. Those resources identified in the table as impacted or potentially impacted will be brought forward for analysis.

Resource	Initial and date	Comment or Reason for Dismissal from Analysis
Air Quality *Ty Webb, Chad Meister, Melissa Hovey*	TW, 3/26/2013	The proposed actions will not impact air quality.
Geology/Minerals *Stephanie Carter, Melissa Smeins*	SSC, 4/18/2013	The proposed actions will not impact minerals.
Soils *John Lamman*	JL, 03/05/2013	Standard 1 is currently being met on the allotments and the proposed action and alternatives as described will not deviate from this achievement. Any impacts would be negligible.
Water Quality Surface and Ground *John Smeins*	JS, 4/9/2013	Water is non-existent or very limited within the allotments. The Land Health Standard for water quality is being met on these allotments. Water quality impacts from the Proposed Action would be negligible.
Invasive Plants *John Lamman*	JL, 03/05/2013	See affected environment.
T&E and Sensitive Species *Matt Rustand*	MR, 4/29/13	Mexican spotted owls are known from eastern Fremont County and western Pueblo County but have not been located in areas addressed in this EA. Peregrine falcons are no longer a T&E species but are considered BLM sensitive species. Peregrine falcons could be expected to use the project area but there are no known eyries in the analysis area. Goshawks are considered a BLM sensitive species but habitat for goshawk in the project area is limited to higher elevation forests. There are no known records of BLM sensitive plant species in the area. No impacts are anticipated to TES Species based on analysis of the proposed action. The public lands are currently meeting Standard 4 and will continue to meet standards post project implementation.
Vegetation *Jeff Williams, Chris Cloninger, John Lamman*	JL, 03/05/2013	See affected environment.
Wetlands and Riparian *Dave Gilbert*	DG, 5/2/13	Allotments are upland with water sources/riparian located on private lands.
Wildlife Aquatic *Dave Gilbert*	DG,5/2/13	Allotments are upland where the substantial aquatic habitat is located on private lands.
Wildlife Terrestrial *Matt Rustand*	MR, 4/29/13	See affected environment.

Resource	Initial and date	Comment or Reason for Dismissal from Analysis
Migratory Birds *Matt Rustand*	MR, 4/29/13	See affected environment.
Cultural Resources *Monica Weimer, Erin Watkins*	EW, 3/19/2013	Pursuant to BLM Instruction Memorandum Number CO-2002-029, RGFO cultural resources staff conducted a literature review of previous inventories conducted (35% of the total public land acreage) and sites recorded on the public land in the allotment area. After consulting with the range staff to identify concentrations of livestock and potential damage, it was determined that no historic properties would likely be impacted by the proposed undertaking.
Native American Religious Concerns *Monica Weimer, Erin Watkins*	EW, 3/19/2013	BLM consulted with 17 tribes regarding the proposed grazing permit renewal (see list in Chapter 4 (4.2 Tribes, Individuals, or Agencies Consulted). BLM received no comments. The literature review indicated that aboriginal sites have been recorded within the allotment boundaries. Site distribution is low in density and not coincident with livestock concentration areas. Therefore, it is unlikely that any traditional cultural properties or other sites of concern to the tribes will be affected by grazing.
Economics *Dave Epstein, Martin Weimer*	mw, 4/1/13	This action will not result in significant impacts to the socio economics of individuals or the region.
Paleontology *Melissa Smeins, Stephanie Carter*	SSC, 4/18/2013	The proposed actions will not impact paleontological resources.
Visual Resources *Kalem Lenard*	KL, 3/20/2013	Visual resources would not be impacted by this proposed action. Additional analysis for impacts to visual resources would be conducted as proposed.
Environmental Justice *Martin Weimer*	mw, 4/1/13	The proposed action affects areas that are rural in nature. The land adjacent to these parcels is open rangeland, as a result, there are no minority or low-income populations in or near the project area. As such, the proposal will not have a disproportionately high or adverse environmental effect on minority or low-income populations.
Wastes Hazardous or Solid *Stephanie Carter*	SSC, 4/18/2013	The proposed actions will not involve use of materials that would result in generation of solid and/or hazardous wastes. Therefore, there is no concern with potential impacts involving wastes.
Recreation *Kalem Lenard*	KL, 3/20/2013	The parcels of public land affected by the proposed action see very little recreation use and have limited public access. The proposed action would not impact recreation resources.
Farmlands Prime and Unique *Jeff Williams, Chris Cloninger, John Lamman*	JL, 03/05/2013	No prime or unique Farmlands.
Lands and Realty *Steve Craddock, Vera Matthews*	vm, 5/2/2013	Present and not effected.
Wilderness, WSAs, ACECs, Wild & Scenic Rivers *Kalem Lenard*	KL, 3/20/2013	These resources are not present within the project area.

Resource	Initial and date	Comment or Reason for Dismissal from Analysis
Wilderness Characteristics *Kalem Lenard*	KL, 3/20/2013	Lands with wilderness characteristics or the potential for wilderness characteristics are not present within the project area.
Range Management *Jeff Williams, Chris Cloninger, John Lamman*	JL, 03/05/2013	See affected environment.
Forest Management *Ken Reed*	KR 3/19/13	The proposed action will not impact forest management or forest health.
Cadastral Survey *Jeff Covington*	JC 3/25/13	The proposed action will not impact Cadastral Survey.
Noise *Martin Weimer*	mw, 4/1/13	This action will not result in any significant impacts due to noise or result in any increased noise levels.
Fire *Bob Hurley*	BH, 3/19/2013	The proposed action will not create or elevate risk factors leading to unwanted wildland fire ignition.
Law Enforcement *Steve Cunningham*	mw, 4/1/13 for SC	There are no law enforcement issues associated with this action.

The affected resources brought forward for analysis include:

- Invasive Plants
- Vegetation
- Wildlife Terrestrial
- Migratory Birds
- Range Management

3.2 BIOLOGICAL RESOURCES

3.2.1 Invasive Plants*

Affected Environment: Invasive plants known to occur within the project boundary include: Diffuse knapweed, Scotch thistle, Canada thistle, Russian knapweed, Salt cedar, Musk thistle, White top, Perennial pepperweed, Myrtle spurge, Leafy spurge,

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The impacts from the type of grazing proposed in this alternative would not result in the type of soil disturbance needed to increase the risk of invasive plant invasion. Livestock can transport invasive plant seeds clinging to fur and contained in their digestive system.

Protective/Mitigation Measures: Allotments would be monitored by BLM staff and grazing permittees for the presence of weeds on the Colorado State Noxious Weed list A and B. Identified noxious weeds will be treated.

Cumulative Impacts: The impacts of the proposed action when considered in addition to the existing surface disturbing activities in the general area would not increase the risk of noxious weed invasion.

No Grazing Alternative

Direct and Indirect Impacts: Removal of livestock grazing from the allotments in the proposed action could allow some populations of invasive plants to increase in size.

Protective/Mitigation Measures: Allotments would be monitored by BLM staff for the presence of weeds on the Colorado State Noxious Weed list A and B. Identified noxious weeds would be treated.

Cumulative Impacts: The impacts of the proposed action when considered in addition to the existing noxious weeds in the general area would not increase the risk of noxious weed invasion.

*Invasive plants are plants that are not part of (if exotic), or are a minor component of (if native), the original plant community or communities that have the potential to become a dominant or co-dominant species on the site if their future establishment and growth are not actively controlled by management interventions, or are classified as exotic or noxious plants under state or federal law. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants.

3.2.2 Vegetation (includes a finding on standard 3)

Affected Environment: The project area encompasses high plains to alpine environments. Elevation of the allotments range from 5,900 to 10,400 feet (livestock are unlikely to graze above 9,500 feet in the project area). The climate is semi-arid with precipitation averaging 9 to 18 inches annually. Typically the average frost free period is between May 11 and October 31 on the high plains and between June 1 and September 30 in alpine areas.

The vegetation communities of the project area are diverse depending on aspect and elevation. Apache City is in the high plains short grass prairie dominated Blue grama. Other common species include galleta, cholla, threeawn, ring muhly, and alkali sacaton. Hezron Gulch and Eight Mile Hill are in the foothills, an area that supports pinyon pine, juniper, true mountain mahogany, blue grama, needleandthread, and wheatgrasses. The potential vegetation on the Silver Mountain and Alamo Allotments is grass and sagebrush at the lower elevations, montane and subalpine coniferous forest and some grassland at the mid and high elevations, and alpine

tundra on the mountain peaks above timberline. Some common plants are mountain big sagebrush, western wheatgrass, and needleandthread at the lower elevations; ponderosa pine, Rocky Mountain Douglas-fir, white fir, Arizona fescue, mountain muhly, common snowberry, Parry's oatgrass, and mountain brome at mid elevations; Engelmann spruce, subalpine fir, corkbark fir, lodgepole pine, limber pine, bristlecone pine, grouse whortleberry, elk sedge, and Thurber's fescue at the higher elevations; and kobresia, alpine bluegrass, alpine clover, and golden avens above timberline.

Environmental Effects

Proposed Action
Direct and Indirect Impacts: The allotments are currently meeting public land health for Standard 3. The authorized use in the Proposed Action is the estimated grazing capacity of the public land on the allotments and is estimated to result in utilization of 40 to 60% of the annual forage production of desirable forage species during the growing season. This level of forage utilization will meet Colorado Livestock Grazing Management Guidelines. Authorizing grazing use on the allotments as described in the proposed action would not have any negative impacts and continue to promote achievement of public land health standards.

Protective/Mitigation Measures: None.
Cumulative Impacts: See Cumulative Impact Summary

No Grazing Alternative
Direct and Indirect Impacts: Not renewing the current grazing permit as prescribed by this alternative would remove grazing use on vegetation on the public land. This in turn would result in an initial increase in plant vigor and litter production. However, precipitation in this area can be fairly low. Due to these dry conditions, decomposition of litter and "standing dead" plant material is relatively slow and the return of nutrients from these materials to the soil is slow. Livestock grazing, when managed properly, tends to harvest plant biomass and return a higher potion of the nutrients to the soil (and more quickly) than allowing the plant to decompose without grazing use. Harvesting a portion of a plant's biomass, when done properly, tends to stimulate new growth and improve plant vigor. The effect of livestock hooves also tends to break up soil crusts and improve the soil surface as a seed bed for plant reproduction. A lack of periodic grazing use could result in an eventual decrease in plant vigor due to slow decomposition of litter cover. This alternative would initially increase plant vigor and litter production but would eventually result in movement away from applicable standards.

Protective/Mitigation Measures: Monitor for livestock trespass.
Cumulative Impacts: See Cumulative Impact Summary

3.2.3 Wildlife Terrestrial (includes a finding on standard 3)

Affected Environment: Several habitat types are found within the area covered by this EA. At lower elevations the habitat types are primarily pinyon pine and juniper. Open areas of mountain grassland are interspersed throughout the area and mountain shrubs such as currant and mountain

mahogany are abundant, especially on south slopes. Pinyon-juniper habitat supports the largest nesting bird species list of any upland vegetation type in the West. Ponderosa pine, mixed conifer and mountain shrubland habitats are found at higher elevations in the project area. These sites are very dry and warm, with less than 25 inches of precipitation annually. Mature ponderosa pine forests on dry sites are open with mature trees achieving wide separation as they compete for limited soil moisture. Grassy ground cover is maintained by frequent low-intensity fires. Ponderosa pines are the largest conifers in Colorado and gambel oak is a common component of the understory, typically in a shrubby form. Other common understory shrubs include mountain mahogany and wax currant. Tree species sometimes found mixed with ponderosa pine are junipers, pinyon pine, aspen, white fir, and Douglas-fir.

Terrestrial species found in the analysis area include bighorn sheep, elk, mule deer, black bear and mountain lion. In Colorado, mountain sheep prefer high-visibility habitat dominated by grass, low shrubs, and rock cover, areas near open escape terrain, and topographic relief. Elk tend to inhabit higher elevations during spring and summer and migrate to lower elevations for winter range. During winter, elk form large mixed herds on favored winter range. Mule deer occupy all ecosystems in the analysis area from grasslands to higher mixed conifer habitats. They reach their greatest densities in shrublands on rough, broken terrain, which provide abundant browse and cover. Mule deer in the area frequently use wet hay meadows on private lands, especially in the spring. Deer densities are slowly increasing after several years of below average populations. In Colorado black bears are most common in montane shrublands and forests, and subalpine forests at moderate elevations, especially in areas with well-developed stands of oakbrush or berry-producing shrubs such as serviceberry and chokecherry. Black bears are locally common in suitable habitats and occur in all habitat types throughout the area. Mountain lions are most common in rough, broken foothills and canyon country, often in association with montane forests, shrublands, and pinyon-juniper woodlands. Mountain lions are common in the analysis area.

A variety of raptor species occur in the planning area including: golden eagle, prairie falcon, peregrine falcon, red-tailed hawk, Coopers hawk, sharp-shinned hawk, and kestrel. Other species that may occur in smaller numbers include: ferruginous hawk, rough-legged hawk, Swainson's hawk, harrier, osprey and goshawk. The Merriam's turkey is a fairly common resident in foothills and mesas of southern Colorado. The Merriam's turkey is common in the analysis area in suitable habitat. Merriam's are found primarily in ponderosa pine forests with an understory of gambel oak. In addition, a wide variety of small mammals and birds are found throughout the allotments that are included in this EA.

The allotments are currently mapped as elk winter range by Colorado Parks and Wildlife. All allotments have few acres accessible to cattle for grazing to due topography barriers. At the current time, the allotments remain in good condition, providing a variety of browse species available to wintering elk herds.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The proposed actions to lease for 10 years include specific forage utilization standards on allotments under "Custodial" management. The proposed action includes a utilization standard in the new permit that is desirable in order to assure sufficient residual vegetation to protect soil from wind and water erosion and allow adequate seed dissemination and seedling establishment. The proposed action will maintain vegetation in a condition that will continue to support terrestrial wildlife species on the allotment. However, domestic livestock will not reach all areas within the allotment boundary. There will be no impacts from the proposed action.

Protective/Mitigation Measures: None.

No Grazing Alternative

Direct and Indirect Impacts: Removal of livestock from the allotments would be expected to elicit the greatest response in small mammal species that typically benefit from increasing vegetative, forage and litter cover (shrews, voles). The Hezron allotment has been in a non-use state for some time and therefore it is suspected that small mammal densities are likely at or near potential. The most noticeable improvements would be in mid-seral communities. Although annual, invasive vegetation persists in these communities, there is a strong perennial component which will likely become more pervasive over time. Continued non-use is not expected to improve early seral communities. Due primarily to historical grazing practices; these communities have crossed a threshold where improvements to vegetative conditions would be extremely difficult without some type of intervention (fire, chemical).

Protective/Mitigation Measures: None.

Finding on the Public Land Health Standard for Plant and Animal Communities: These lands are currently meeting the public land health standard for plant and animal communities. The proposed action should not have an effect on that standing.

3.2.4 Migratory Birds

Affected Environment: The BLM has agreed to a memorandum of understanding with Fish and Wildlife Service that strengthens migratory bird conservation by identifying and implementing strategies that promote conservation and avoid or minimize adverse impacts on migratory birds. The MOU is in response to the Migratory Bird Treaty Act which prohibits the take of migratory birds. Take can be defined as any means or in any manner to pursue, hunt, capture, or attempt to capture or kill, possess, etc. as described in 16 USC 709-712. The BLM uses the guidance provided in the MOU to assist in NEPA compliance and the mitigation of potential impacts to migratory birds during project implementation.

Several habitat types are found within the area covered by this EA. At lower elevations the habitat types are primarily pinyon pine and juniper. Open areas of mountain grassland are interspersed throughout the area and mountain shrubs such as currant and mountain mahogany are abundant, especially on south slopes. Pinyon-juniper habitat supports the largest nesting bird species list of any upland vegetation type in the West. The richness of the pinyon-juniper vegetation type, however, is important due to its middle elevation. Survey tallies in pinyon-

juniper are similar in species diversity to the best riparian habitat. Several species are found in the pinyon-juniper habitat and include: black-chinned hummingbird, Lewis's Woodpecker, gray flycatcher, Cassin's kingbird, gray vireo, pinyon jay, juniper titmouse, black-throated gray warbler, Scott's oriole, ash-throated flycatcher, Bewick's wren, mountain chickadee, white-breasted nuthatch, and chipping sparrow.

Ponderosa pine, mixed conifer and mountain shrubland habitats are found at higher elevations in the project area. In Fremont County these sites are very dry and warm areas, with less than 25 inches of precipitation annually. Mature ponderosa pine forests on dry sites are open, with mature trees achieving wide separation as they compete for limited soil moisture. Grassy ground cover is maintained by frequent low-intensity fires. Ponderosa pines are the largest conifers in Colorado and Gambel oak is a common component of the understory, typically in a shrubby form. Other common understory shrubs include mountain mahogany and wax currant. Tree species sometimes found mixed with ponderosa pine are junipers, pinyon pine, aspen, white fir, and Douglas-fir. Birds typical of these habitat types include Merriam's turkey, Williamson's sapsucker, pygmy nuthatch, western bluebird, band-tailed pigeon, Grace's warbler, flammulated owl, red-breasted nuthatch, violet-green swallow, western tanager, and chipping sparrow. These sites also include small areas of aspen habitat and mountain grassland habitat.

Species that could occur within the project area that are listed on the Birds of Conservation Concern list for the Southern Rockies/Colorado Plateau region include: pinyon jay, ferruginous hawk, Lewis's woodpecker, gray vireo, juniper titmouse, Grace's warbler, golden eagle, and Cassin's finch.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The results of several studies debating grazing versus non-grazing impacts to migratory birds remains mixed. If grazing is managed correctly, long-term benefits may be an increase in plant species diversity, plant vigor, and reduction of excessive vegetation litter. Bock et al. (1993) suggest very little is known in regards to impacts to migratory birds from grazing in western forests. Historically, these areas were exposed to heavy grazing which correlates with the transformation of these woodlands into denser forests with a decreased understory of herbaceous plants. This transformation diminished the frequency of low intensity fire. Furthermore, historical grazing regimes correlate with the expansion of pinyon-juniper woodland. Again, historical grazing reduced cover of grasses, facilitating establishment of pinyon- juniper seedlings and simultaneously reducing ground fires that otherwise might eliminate woody vegetation. The change in herbaceous structure caused a change in migratory bird species diversity by negatively affecting species dependent on herbaceous and shrubby cover or species that require open savannahs as opposed to closed-canopy forests. However, positive impacts to species requiring closed canopy systems likely occurred.

Currently, BLM's standards for public land health do not allow for excessive grazing that would alter forest structure in the manner historical grazing regimes may have. The Hezron allotment has been in a non-use state (effectively identical to the no grazing alternative) and likely would have remained in a non-use state for an indefinite amount of time. The proposed action will likely have some potential for trampling/disruption of nests, particularly in ground or

low shrub nesting species; however it is expected to be minimal. Reductions in the amount of herbaceous understory available for forage and cover resources prior to the nesting season are anticipated under the proposed grazing system. It is suspected that nest densities may be suppressed to some degree in those areas that are expected to experience concentrated livestock use. The proposed grazing system is not expected to have any measurable influence on breeding bird abundance or reproductive/recruitment success in the permit acres of woodland types. Low forage availability and more rugged terrain generally limit livestock use of these habitats.

Protective/Mitigation Measures: None.

No Grazing Alternative

Direct and Indirect Impacts: Removal of livestock from the allotments would be expected to elicit the greatest response in small mammal species that typically benefit from increasing vegetative, forage and litter cover (shrews, voles). The Hezron allotment has been in a non-use state for some time and therefore it is suspected that migratory bird nesting densities are likely at or near potential. The most noticeable improvements would be in mid-seral communities. Although annual, invasive vegetation persists in these communities, there is a strong perennial component which will likely become more pervasive over time. Continued non-use is not expected to improve early seral communities. Due primarily to historical grazing practices; these communities have crossed a threshold where improvements to vegetative conditions would be extremely difficult without some type of intervention (fire, chemical).

Protective/Mitigation Measures: None.

3.3 LAND RESOURCES

3.3.1 Range Management

Affected Environment: Forage availability for livestock varies dramatically on the allotments covered by the proposed action. Differences in vegetation, elevation, precipitation, number of allotment acres, and especially topography are responsible for the variability. The Apache City allotment has 80 – 100% of it's area available to livestock grazing. The Alamo, Eight Mile Park, Hezron, and Silver Mountain allotments have 5 – 20% of their area available to livestock grazing. The grazing schedule and estimated carrying capacity of the public land in each of the allotments is described under the "Introduction and Background" portion of this analysis.

Environmental Effects

Proposed Action

Direct and Indirect Impacts: The proposed action as scheduled for the allotments meets the Standards for Public Land Health and Guidelines for Livestock Grazing in Colorado. The proposed action includes specific utilization standards for forage species for the allotment that would ensure for adequate vegetative cover, recovery from gazing and adaptation to climatic conditions. Additional stipulations addressing cultural and paleontological resources will be added to the permit. Adaptive management gives the BLM and permittee the flexibility to

implement a number of tools to meet desired conditions on the ground and adapt to environmental changes that may occur on an annual basis.

Protective/Mitigation Measures: None.
Cumulative Impacts: See Cumulative Impacts Summary

No Grazing Alternative
Direct and Indirect Impacts: Under this alternative, grazing use would be cancelled on the allotments. The impacts would occur for both the permittees and the BLM in the long term. The permittees would have to find alternatives for the loss of potential forage from the allotments. Not authorizing grazing use as prescribed by this alternative would remove utilization on vegetation on the public land. This in turn would result in an initial increase in plant vigor and litter production. Precipitation on the allotments can be fairly low. Due to these dry conditions, decomposition of litter and "standing dead" plant material is relatively slow and the return of nutrients from these materials to the soil is therefore also slow. Livestock grazing, when managed properly, tends to harvest plant biomass and return a higher potion of the nutrients to the soil (and more quickly) than allowing the plant to decompose without grazing use. Furthermore, harvesting a portion of a plant's biomass, when done properly, tends to stimulate new growth and improve plant vigor. The effect of livestock hooves also tends to break up soil crusts and improve the soil surface as a seed bed for plant reproduction. Therefore, a lack of periodic grazing use in the allotments could result in an eventual decrease in plant vigor, and the amount of vegetative and litter cover. This alternative would initially increase plant vigor and litter production but would eventually result in movement away from applicable standards.

Protective/Mitigation Measures: Monitor for livestock trespass.

3.4 CUMULATIVE IMPACTS SUMMARY

Range Management: Beginning in the 1850s, most of the arable land in and around the project area was being actively cultivated. Other land that was accessible to livestock was subjected to high stocking rates and season long grazing that had negative impacts on vegetative species composition and soil stability. Overall stocking rates are now lower due to the unsustainability of the early rates and many ranchers use modern grazing management techniques to promote healthy and resilient rangelands. Exurban development of lands that have been historically a part of family ranches near the project area has dramatically increased fencing and has frequently had negative impacts to plant species composition, soil stability and big game movement. The terms and conditions for any grazing permit that would be issued would limit utilization to 40% - 60% on grass forage species during the growing season and 80% of previous growth during the dormant season. Utilization on woody riparian species such as cottonwoods, aspen and willows will be limited to 40% of the current year's growth. Grazing use that exceeds these levels would not be authorized. Livestock utilization of public land in the project area will be less than private land in the area. Cumulative impacts are expected to be minor.

CHAPTER 4 - CONSULTATION AND COORDINATION

4.1 LIST OF PREPARERS AND PARTICIPANTS

Please see Interdisciplinary Team Review list for BLM Participants

4.2 TRIBES, INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

BLM consulted with 17 tribes regarding the proposed grazing permit renewal. Included were the Apache Tribe of Oklahoma, Cheyenne and Arapaho Tribes of Oklahoma, Cheyenne River Lakota Tribe, Comanche Tribe of Oklahoma, Crow Creek Sioux, Jicarilla Apache Nation, Kiowa Tribe of Oklahoma, Northern Arapaho Tribe, Northern Cheyenne Tribe, Oglala Sioux Tribe, Pawnee Nation of Oklahoma, Rosebud Sioux Tribe, Eastern Shoshone Tribe, Southern Ute Tribe, Standing Rock Sioux Tribe, Ute Tribe, and the Ute Mountain Ute Tribe. BLM received no comments.

CHAPTER 5 - REFERENCES

Bureau of Land Management (BLM). 1993. Draft Resource Management Plan and Environmental Impact Statement. Royal Gorge Field Office. Canon City, Colorado.

Bureau of Land Management. 1996. Royal Gorge Resource Area Resource Management Plan and Record of Decision. Royal Gorge Field Office. Canon City, Colorado.

Bureau of Land Management. 2008. H-1790-1 National Environmental Policy Handbook. Washington, D.C.

Finding Of No Significant Impact
(FONSI)

DOI-BLM-CO-200-2013-0049 EA

Based on review of the EA and the supporting documents, I have determined that the project is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects from any alternative assessed or evaluated meet the definition of significance in context or intensity, as defined by 43 CFR 1508.27. Therefore, an environmental impact statement is not required. This finding is based on the context and intensity of the project as described below:

RATIONALE:

Context:

The Proposed Action issues grazing authorizations on five allotments where control of the base property for each allotment has changed. Livestock grazing on the allotments is light to nearly nonexistent (due to steep slopes, dense woody vegetation and adjacent private land being subdivided), with the exception of Apache City. The allotments are located along the southern half of Colorado's Front Range, ranging in elevation from 5,600 to nearly 10,400 feet, and do not contain any perennial streams. Eight Mile Park Allotment is located along and near the Royal George. Most of the terrain is rocky, steep, and is sparsely vegetated or has dense stands of Pinion pine and juniper. A small portion of the allotment is dry mountain park. Apache City Allotment is adjacent to Interstate Highway 25 near the Apache City exit. The allotment terrain is relatively flat and is dissected by a deep arroyo caused by historic agricultural practices. Vegetation on the allotment is dominated by Blue grama and shrub species. The Herzon Gulch Allotment is located 5 miles south of Walsenburg adjacent to Interstate Highway 25. The allotment terrain is primarily the steep side of a sandstone bluff and a small portion of the top of the bluff. Vegetation on the allotment is dominated by a dense stand of Pinion pine and juniper. Understory is nearly nonexistent due to stand density and soils with a thin A horizon. The Alamo and Silver Mountain Allotments are primarily located on the steep slopes of Silver Mountain and Mount Mestas about 4 miles east of La Veta pass. Vegetation is dominated by dense stands of spruce fir with minimal understory. Two hundred acres of the allotments are located in rolling hills dominated by Pinion pine and juniper. The Proposed Action is significant to the small local ranches that have livestock that will occasionally be on the BLM grazing allotments.

Intensity

Impacts that may be beneficial and adverse:

Livestock grazing, when managed properly, tends to harvest plant biomass and return a higher potion of the nutrients to the soil (and more quickly) than allowing the plant to decompose without grazing use. Furthermore, harvesting a portion of a plant's biomass, when done

properly, tends to stimulate new growth and improve plant vigor. The effect of livestock hooves also tends to break up soil crusts and improve the soil surface as a seed bed for plant reproduction. With the exception of the Apache City Allotment, very little of the other 4 allotments will be grazed by livestock.

Public health and safety:
The proposed action reflects analyses and management practices that do the most to protect important water supplies by preventing erosion and sediment production. Sediment production, from a water quality standpoint is not a concern due to the dry, upland nature of the allotments, and the fact that very little of four of the five allotments being analyzed will be grazed by livestock. The Apache City Allotment will be grazed across most of its area but is not prone to significant soil erosion due to flat topography. The proposed action would leave sufficient ground cover present to protect the soils from eroding and downstream waters would not be affected from grazing on public lands.

Unique characteristics of the geographic area:
The EA evaluated the area of the proposed action and determined that no unique geographic characteristics such as: wild and scenic rivers, prime or unique farmlands, Areas of Critical Environmental Concern or designated wilderness areas or wilderness study areas; were present.

Degree to which effects are likely to be highly controversial:
Analysis for the renewal of grazing permits is a common action conducted under NEPA. Conditions and impacts will vary and be unique to each allotment. There is no disagreement or controversy among ID team members or reviewers over the nature of the effects of the action on resource values.

Degree to which effects are highly uncertain or involve unique or unknown risks:
BLM has a long history of managing public lands for multiple-use. Grazing is one part of that multiple-use mandate. Given the BLM's institutional knowledge on this subject, all risks were considered in the EA and were found to be neither unique nor unknown.

Consideration of whether the action may establish a precedent for future actions with significant impacts:
The proposed action does establish a standard of precedent for the permit renewal process, in that there is comprehensive review of all resource values and land health standards are either met or exceeded.

Consideration of whether the action is related to other actions with cumulatively significant impacts:
In general, the allotments in the analysis area are surrounded by private lands. The continuation of livestock grazing on public lands will in part help promote or maintain ranching in the area and open space. In addition, the continuation of livestock grazing as described in the proposed action will not create any new cumulative impacts to the existing situation and given BLMs intense management practices, renewing the grazing could contribute to enhancing land health and productivity.

Scientific, cultural or historical resources, including those listed in or eligible for listing in the National Register of Historic Places:
Pursuant to BLM Instruction Memorandum Number CO-2002-029, RGFO cultural resources staff conducted a literature review of previous inventories conducted (35% of the total public land acreage) and sites recorded on the public land in the allotment area. After consulting with the range staff to identify concentrations of livestock and potential damage, it was determined that no historic properties might potentially be impacted by the proposed undertaking.

Threatened and endangered species and their critical habitat:
Mexican spotted owls are known from eastern Fremont County and western Pueblo County but have not been located in areas addressed in this EA. Peregrine falcons are no longer a T&E species but are considered BLM sensitive species. Peregrine falcons could be expected to use the project area but there are no known eyries in the analysis area. Goshawks are considered a BLM sensitive species but habitat for goshawk in the project area is limited to higher elevation forests. There are no known records of BLM sensitive plant species in the area. No impacts are anticipated to TES Species based on analysis of the proposed action. The public lands are currently meeting Standard 4 and will continue to meet standards post project implementation.

Any effects that threaten a violation of Federal, State or local law or requirements imposed for the protection of the environment:
The proposed action conforms with the provisions of NEPA (U.S.C. 4321-4346) and FLPMA (43 U.S.C. 1701 et seq.) and is compliant with the Clean Water Act and The Clean Air Act, the National Historic Preservation Act, Migratory Bird Treaty Act (MBTA) and the Endangered Species Act.

NAME OF PREPARER: John Lamman

SUPERVISORY REVIEW: Melissa K.S. Garcia

NAME OF ENVIRONMENTAL COORDINATOR: /s/ Martin Weimer

DATE: 7/5/13

SIGNATURE OF AUTHORIZED OFFICIAL: /s/ Keith E. Berger
Keith E. Berger, Field Manager

DATE SIGNED: 7/5/13